

almost as long a period, North American workers should not abandon it. Instead they should consider *T. erdoesi* Domenichini a synonym.

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AN ANNOTATED CHECK LIST OF COSTA RICAN COCKROACHES

(DICTYOPTERA: BLATTARIA)

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ABSTRACT—This check list of Costa Rican cockroaches gives specific locality records for all but the most abundant species. It also notes, for most collection records, where the actual specimens are housed. Twenty-nine species are recorded for Costa Rica for the first time. The total list includes 115 named species or subspecies plus 35 new or unidentified species which are not named.

Recent interest in the fauna and flora of Costa Rica, stimulated in part by the activities of the Organization for Tropical Studies, has made the publication of taxonomic studies relating to that Central American country particularly desirable. Previous to the present paper the most recent listing of Costa Rican cockroaches was included in the notes on Orthoptera by Rehn (1905), in which 38 species were recorded. In an earlier report Biolley (1900) listed 35 valid species, a remarkable increase over the 12 cockroach species noted by Tristán (1896).

The objective of this listing is to provide locality data for all species of cockroaches collected in Costa Rica. This information was derived from both searching the literature and examining material at the U. S. National Museum (USNM), the Academy of Natural Sciences Philadelphia (ANSP), the University of Michigan Museum of Zoology (UMMZ) and certain private collections. Where a given species has been recorded more than once from the same locality only a single listing has been selected to represent that locality in order to avoid duplication. Localities are arranged according to province. The 7 provinces are noted by 4-letter symbols as follows: ALAJ—Alajuela, CART—Cartago, GCTE—Guanacaste, HERD—Heredia, LIMN—Limon, PUNT—Puntarenas and SJOS—San Jose. Collection dates are noted by month and year where possible. Lack of a date indicates an old record. The museum or collection where the recorded specimen may now be found is indicated where possible. The 4-letter symbols for these collections are listed by Arnett and Samuelson (1969) with the following additions: AWCR—Prof. Alvero Wille collection, Universidad de Costa Rica; DCRC—Dr. David C. Rentz collection—now at ANSP; FWFC—Prof. Frank W. Fisk collection, at The Ohio State University; IEMS—Instituto Entomologia Madrid, Spain; RZCR—Prof. Rodrigo Zeledon collection, Universidad de Costa Rica.

The locality records named in the list represent the efforts of some 50 collectors but only a relatively few persons provided most of the material. The specimens recorded by Rehn (1903) at USNM were collected by Schild and Burgdorf before 1900, but Rehn's (1905) paper lists material collected by P. Biolley and J. F. Tristán and deposited at ANSP. J. A. G. Rehn, himself, collected in Costa Rica in the 1920's while H. R. Roberts has collected for ANSP more recently. The names of Cartwright, Underwood and C. H. Ballou appear on early USNM material, while S. S. and W. D. Duckworth provided much recent material. T. H. Hubbell, I. J. Cantrall and T. J. Cohn have collected for UMMZ. Carlos E. Valerio of Costa Rica assisted the author in collecting a portion of the FWFC material as well as providing independently captured specimens to AWCR, FWFC and RZCR. All of the Virginia Polytechnic Institute (VPIC) material was collected by Prof. Michael Kosztarab.

Current names and partial synonymy for the taxa listed follow K. Princis' recent catalog of Blattariae (1963, 1964, 1965a, 1966, 1967, 1969). Princis lists 64 species from "Kostarika," while 11 other species noted by him as circumtropical, tropical or Central American are listed below with specific Costa Rican localities. However, the arrangement of genera and higher categories follows the McKittrick (1964) system as extended by Roth (1969) and others. Following each species name in the check list are listed selected references in which locality records

will be found. If no reference is noted then the species has not previously been recorded from Costa Rica.

The assistance of Dr. Ashley B. Gurney, Systematic Entomology Laboratory, U. S. Department of Agriculture (at U. S. National Museum) is gratefully acknowledged. His identification of several specimens has made it possible to report many new records among the 115 named species. Through our joint effort one new Costa Rican species, *Xestoblatta cantralli* Fisk and Gurney, has been named and we are hopeful that several more will follow from among the 35 new or unidentified species in the list. Finally, this list must increase as more material is collected or recorded.

BLATTIDAE

LAMPROBLATTINAE

Lamproblatta albipalpus Hebard 1919.

ALAJ: Quesada '66 (FWFC). CART: Turrialba '66 (FWFC). GCTE: H. Ciruelas I/70 (VPIC); Playa del Coco (AWCR); Tilaran '66 (FWFC). LIMN: La Lola, near Madre de Dios '61 (UMMZ); Pto. Limón VII/66 (UMMZ). PUNT: Parrita '66 (FWFC). SJOS: San Jose '64 (FWFC).

BLATTINAE

Neostylopyga rhombifolia (Stoll 1813).—Princis (1966) "circumtropical."

PUNT: San Isidro, near Puntarenas (RZCR); Puntarenas '66 (FWFC).

Periplaneta americana (L. 1753).—Princis (1966) "circumtropical."

Common in urban areas.

Periplaneta australasiae (Fabricius 1775).—Princis (1966) "circumtropical."

Common in urban areas.

Periplaneta brunnea Burmeister 1838.—Princis (1966) "tropical."

GCTE: Tilaran '64 (FWFC).

POLYZOSTERINAE: EURYCOTINI

Eurycotis biolleyi Rehn 1918.—Princis (1966).

Common.

Eurycotis mexicana (Saussure 1862) ?—Biolley (1900).—Princis (1966) "limited to Mexico."

SJOS: San Jose (Biolley).

Eurycotis mysteca (Saussure 1862) ?—Biolley (1900).—Princis (1966) "limited to Mexico."

HERD: Rancho Flores, foothills of Volc. Barba (Biolley).

Eurycotis n. sp.

ALAJ: Chachagua '66 (FWFC); Quesada '66 (FWFC). CART: Turrialba X/61 (UMMZ). GCTE: Tilaran '66 (FWFC). LIMN: La Emilia IX/27 (ANSP); La Lola, Madre de Dios X/61 (UMMZ). PUNT: San Vito III/69 (DCRC).

Pelmatosilpha rotundata Scudder 1900.—Gurney (1965).—Princis (1966). GCTE: Tilaran VI/68 (FWFC).

POLYPHAGIDAE
HOLOCOMPSINAE

Holocompsa azteca Saussure 1862.—Biolley (1900).

SJOS: San Jose (motionless on walls: Biolley); Lourdes M. B., near San Jose '62 (RZCR).

Holocompsa nitidula (Fabricius 1781) (= *cyanca* Saussure 1864).—Rehn (1905).—Princis (1963) "circumtropical."

ALAJ: Rio Surubres at San Mateo (ANSP).

Zetha simonyi (Krauss 1892), (= *Holocompsa simonyi* Krauss 1892), (= *H. chavesi* Bolivar 1894).

SJOS: Cd. Universitaria '61 (RZCR).

LATINDIINAE

Buboblatta armata (Caudell 1914) (= *Latindia armata* Caudell 1914).

CART: Turrialba II/65 (USNM). HERD: La Selva '64 (UMMZ). PUNT: San Vito II/70 (VPIC).

Latindia dohrniana Saussure & Zehntner 1894.

ALAJ: Quesada VII/66 (FWFC). GCTE: Arenal VII/66 (FWFC). SJOS: 16 Km. No. of Quepos VIII/66 (FWFC).

Paralattindia azteca (Saussure 1868).

ALAJ: Zarceero VII/66 (FWFC).

BLATTELLIDAE
ANAPLECTINAE

Anaplecta bivittata Brunner 1865.

CART: Turrialba III/65 (USNM). GCTE: Arenal VII/66 (FWFC).

Anaplecta fallax Saussure 1862 (= *decipiens* S. & Z. 1893).—Rehn (1905).—Princis (1965a).

GCTE: Arenal VII/66 (FWFC). SJOS: La Palma (decayed leaves) (ANSP); Rio Surubres at San Mateo (under stones) (ANSP).

Anaplecta hemiscotia Hebard 1920.

CART: Tapanti '66 (UMMZ). PUNT: San Vito III/69 (DCRC).

Anaplecta mexicana Saussure 1868.—Calvert & Calvert (1917).—Hebard (1924).—Princis (1965a).

CART: Tapanti VII/66 (FWFC). GCTE: Arenal VII/66 (FWFC). LIMN: La Emilia (from epiphytes) '09 (ANSP). SJOS: La Palma (ANSP).

Anaplecta mexicana subspecies *gemma* Hebard (= *gemma* Hebard 1920).

CART: Rio Navarro VII/27 (ANSP); Tapanti VII/66 (FWFC); Turrialba II/65 (USNM). HERD: Finca Starke, near Pto. Viejo II/66 (ANSP). LIMN: La Emilia VIII/23 (ANSP). PUNT: San Vito III/69 (DCRC).

Anaplecta sp., probably *guamina* Hebard 1920.

LIMN: Los Diamantes '67 (UMMZ); Pto. Limón '66 (UMMZ).

Anaplecta sp., probably *nahua* Saussure 1868.

PUNT: 6 Km. So. of San Vito '67 (FWFC).

Anaplecta sp.

CART: Tapanti (AWCR). LIMN: Waldec (AWCR). SJOS: Cd. Universitaria (RZCR); San Pedro (AWCR).

NYCTIBORINAE

Megaloblatta blaberoides (Walker 1871) (= *rufipes* Dohrn 1887).—Biolley (1900).—Hebard (1920).—Princis (1967).

LIMN: Jimenez (Biolley); Parismina (Biolley). PUNT: San Vito III/69 (DCRC). SJOS: Guaitil de Pirris (Biolley).

Muzoa madida Rehn 1930.—Rehn (1930).

LIMN: La Emilia (dense forest) '27 (ANSP); Rio Reventazon, near Santa Clara (Biolley) (ANSP).

Nyctibora azteca (Saussure & Zehntner 1893).

GCTE: Union of Rio Blanca & Rio Tempisque '60 (RZCR). SJOS: San Jose '65 (RZCR).

Nyctibora noctivaga Rehn 1902.

ALAJ: Orotina X/15, A. Alfaro (USNM). From C. R. intercepted in Plant Quarantine, Boston, Mass. 1925 (USNM).

Nyctibora spp.

Three n. spp. from C. R. are under study at USNM.

Paratropes bilunata Saussure & Zehntner 1893.—Biolley (1900).—Hebard (1920).—Princis (1967).

ALAJ: San Carlos. CART: Turrialba. GCTE: H. Miravalles (Biolley).

Paratropes biolleyi Saussure & Zehntner 1893.—Biolley (1900).—Rehn (1903).—Princis (1967).

ALAJ: Ojo de Agua (RZCR); San Carlos (USNM). CART: Turrialba (USNM). SJOS: San Jose (Biolley).

Paratropes mexicana (Brunner 1865).

ALAJ: Alajuela VII/62 (AWCR).

Paratropes sp. (nymphs)

PUNT: near Rincón, Osa III/69 (DCRC).

BLATTELLINAE

Blattella germanica (L. 1767).—Rehn (1903).—Princis (1969) "cosmopolitan." Common in urban areas.

Chromatonotus infuscatus (Bruner 1906).

CART: Turrialba III/65 (USNM).

Ischnoptera bergrothi (Griffini 1896).—Hebard (1920).—Princis (1965b).

SJOS: Carillo VIII/03 (ANSP).

Ischnoptera inca Saussure & Zehntner 1893.—Hebard (1920).—Princis (1969).

SJOS: Conrejal de Aserri V/06 (ANSP).

Ischnoptera mirella Hebard 1920. Previously recorded only from unique male collected in Panama (Hebard, 1920).

CART: Turrialba II/65 (USNM), 1 male, S. S. & W. D. Duckworth collectors.

Ischnoptera rufa debilis Hebard 1916 (= *I. consobrina*, var. *minor* Saussure 1900).—Hebard (1916c).—Princis (1969).

CART: Corallilo, near Volc. Irazu III/24 (ANSP); Pacayas III/06 (ANSP); Volc. Irazu II/02 (ANSP). HERD: San Rafael IV/65 (AWCR). SJOS: San Jose de la Montana (AWCR); Santa Maria de Dota I/07 (ANSP); Tablazo IX/06 (ANSP).

Ischnoptera rufa occidentalis Saussure 1862 (= *I. consobrina* Saussure 1862).—Hebard (1920).

ALAJ: Alajuela (AWCR). CART: Cartago (AWCR); Turrialba III/65 (USNM). HERD: Heredia (AWCR). LIMN: Pto. Limón '66 (UMMZ). SJOS: Carillo VIII/03 (ANSP); Pozo Azul on Rio Pirris (ANSP); San Jose (AWCR); San Pedro (AWCR).

Ischnoptera rufa rufa De Geer 1773.

CART: Cartago VII/66 (UMMZ); Cerro de la Muerte (AWCR); Tapanti VII/66 (UMMZ); Turrialba '61 (UMMZ). LIMN: La Lola VII/66 (UMMZ); Pto. Limón '64 (FWFC). PUNT: San Vito III/70 (DCRC). SJOS: Cd. Universitaria (AWCR); San Jose (AWCR).

Ischnoptera n. sp.

CART: El Alto de Ochomogo XII/69 (USNM). PUNT: San Vito II/70 (VPIC).

Nelipophygus n. sp.

CART: Turrialba II/65 (USNM).

Nesomylacris n. sp.

CART: Santa Cruz, 13 Km NW Turrialba X/61 (UMMZ); Turrialba IX/61 (UMMZ). HERD: near Volc. Barba VII/66 (FWFC).

Pseudomops cruiicornis (Burmeister 1838).—Rehn (1903).

ALAJ: San Carlos (USNM).

Pseudomops discicollis (Burmeister 1838) (= *discoidalis* (Burmeister 1838)).—Rehn (1903).—Princis (1969).

ALAJ: San Carlos (USNM).

Pseudomops gratus Rehn 1903.—Rehn (1903, 1905).—Princis (1969).

ALAJ: San Carlos (USNM). CART: Rio Reventazon, near Santa Clara (ANSP).

LIMN: Suretka V/24 (USNM).

Pseudomops praeclarus Rehn 1928.—Rehn (1928).—Princis (1969).

ALAJ: San Mateo (USNM). CART: Turrialba (ANSP). LIMN: Batán (Bataan) '56 (USNM); Suretka (ANSP).

Pseudomops septentrionalis Hebard 1917 (= *oblongata* of authors, not Linn. 1758).—Rehn (1933).—Princis (1969).

ALAJ: San Carlos (USNM).

Pseudomops sp.

CART: Tapanti IX/65 (AWCR).

Xestoblatta buscki Gurney 1939

CCTE: Tilaran VII/66 (FWFC).

Xestoblatta cantralli Fisk & Gurney 1968.—Fisk & Gurney (1968).—Princis (1969).

CART: Turrialba '51 (USNM). HERD: Finca La Selva '64 (UMMZ). LIMN: La Lola, near Madre de Dios '61 (UMMZ); Los Diamantes, E. of Guapiles '67 (UMMZ).

Xestoblatta hamata (Giglio-Tos 1898)

CART: Turrialba IX/61 (UMMZ).

Xestoblatta hoplites Hebard 1921.—Hebard (1921).—Gurney (1939).—Princis (1969).

ALAJ: Rio Machuca, near San Mateo I/07 (ANSP). CART: Turrialba '61 (UMMZ). SJOS: San Jose (AWCR). "Costa Rica" (USNM).

Xestoblatta n. sp., near *hamata*.

HERD: Finca La Selva I/70 (VPIC).

PLECTOPTERINAE

Asemoblattana nana (Hebard 1921) (= *Asemoblattana nana* Hebard). Previously recorded only from unique male collected in Colombia (Hebard 1921).

HERD: near Sacramento, Southern slope of Volc. Barba, elev. 2400 M. I/69 (male & female FWFC) (1 male USNM), Carlos E. Valerio collector.

Calhita nahua (Saussure 1868) (= *Ischnoptera nahua* Saussure 1868).—Tristán (1896).—Rehn (1937).—Princis (1969).

GCTE: La Cruz '61 (UMMZ); San Antonio de Nicoya '29 (ANSP). SJOS: Rio Tiribi, San Jose (Tristán).

Caloblatta bicolor Saussure 1893.—Saussure & Zehntner (1893).—Princis (1965a).

CART: Tapanti (AWCR). GCTE: Belen (AWCR). SJOS: Cd. Universitaria (AWCR); San Pedro (AWCR).

Caloblatta tricolor Saussure 1893 ?—Princis (1965a).

Questionable for Costa Rica. No locality record can be found.

Cariblatta imitans Hebard 1916.

GCTE: La Cruz X/61 (UMMZ); Tilaran VII/66 (FWFC).

Cariblatta sp., near *fossicauda* Hebard 1916.

SJOS: Playon, near Parrita (on bananas) VIII/66 (FWFC).

Cariblattoides sp., near *instigator* Rehn and Hebard 1927.

ALAJ: Quesada VII/66 (FWFC). LIMN: La Emilia IX/27 (ANSP).

Ceratinoptera nahua (Saussure 1868) (= *Paraceratinoptera nahua* Saussure 1868).—Hebard (1916a).—Princis (1969).

SJOS: Pozo Azul de Pirris (ANSP).

Ceratinoptera n. sp.

ALAJ: Quesada VII/66 (FWFC). CART: Turrialba VII/64 (USNM). GCTE: Arenal VII/66 (FWFC). LIMN: La Lola '61 (UMMZ). SJOS: Pozo Azul de pirris VIII/27 (ANSP); 16 Km. No. of Quepos VIII/66 (FWFC).

Chorisoneura flavipennis Saussure & Zehntner 1893.—Rehn (1903).—Rehn (1905).—Princis (1965a).

CART: Turrialba (USNM). SJOS: La Palma (ANSP); Rio Surubres at San Mateo (ANSP).

Chorisoneura gemmicula Hebard 1920.

CART: Turrialba IV/57 (USNM). LIMN: Batán (Bataan) VI/51 (USNM).

Chorisoneura panamae Hebard 1920.

GCTE: Tilaran VII/66 (FWFC).

Chorisoneura pellucida (Saussure 1864). Listed as *Chorisoneura diaphana* Princis by Princis (1965a).

CART: Turrialba III/65 (USNM). LIMN: Waldec VII/36 (USNM).

Chorisoneura specilliger Hebard 1920.

SJOS: Rio Surubres (USNM).

Chorisoneura translucida (Saussure 1864).—Hebard (1919).—Princis (1965a).

CART: Turrialba III/65 (USNM). PUNT: Rincón, Osa XI/64 (UMMZ). SJOS: 14.5 Km. No. of Quepos VIII/66 (FWFC); 15 Km. SW. San Isidro del General VII/64 (UMMZ).

Chorisoneura n. sp.

SJOS: San Pedro V/36 (USNM).

Chorisoneura sp.

CART: Turrialba II/65 (USNM).

Chorisoneura sp., near *panamae* Hebard.

CART: III/65 (USNM).

Dendroblatta sobrina Rehn 1916.—Hebard (1920).—Princis (1969).

GCTE: H. Ciruelas, near Cañas I/70 (VPIC). SJOS: Pozo Azul V-VI/02 (ANSP).

Euphyllodromia angustata (Latrielle 1811).—Rehn (1903).—Princis (1969).

Recorded from forest areas in all 7 provinces.

Euphyllodromia liturifera (Walker 1871) (= *E. decastigmata* Hebard 1920).

SJOS: 15 Km. No. of Quepos VIII/66 (FWFC).

Euphyllodromia peruana (Saussure 1864).—Rehn (1903).—Rehn (1905).

ALAJ: San Carlos (USNM). CART: Rio Reventazon, near Santa Clara (ANSP). LIMN: Zent '24 (USNM).

Euphyllodromia sp.

LIMN: Homberg Farm '38 (AWCR); Waldec '42 (AWCR).

Euthlastoblatta n. sp. "A."

SJOS: 16 Km. No. of Quepos '66 (FWFC). (Specimens from other localities in ANSP).

Euthlastoblatta n. sp. "B."

CART: Tapanti VII/66 (FWFC). SJOS: Rio Virilla (San Jose) VII/66 (FWFC).

Imblattella brunneriana (Saussure 1868) (= *Blatta brunneriana* Saussure 1868).—

Calvert & Calvert (1917).—Princis (1969).

CART: Peña Blanca, near Cachi (ANSP).

Imblattella sp., near *brunneriana* (Saussure).

HERD: Finca La Selva (rain forest) I/70 (VPIC).

Imblattella fratercula (Hebard 1916) (= *Neoblattella fratercula* Hebard 1916).—

Princis (1969).

ALAJ: Fortuna, San Carlos (RZCR). LIMN: Pto. Limón '66 (UMMZ).

SJOS: Playon, near Parrita '66 (FWFC).

Imblattella impar (Hebard 1920) (= *Neoblattella impar* Hebard 1920).

CART: Turrialba X/61 (UMMZ). HERD: Finca La Selva I/70 (VPIC).

PUNT: Rincón, Osa '67 (FWFC). SJOS: Damas, near Parrita V/65 (AWCR);

Playon, near Parrita '66 (FWFC); 15 Km. No. of Quepos '66 (FWFC).

Latiblattella angustifrons Hebard 1920.—Princis (1965b, 1969).

CART: Turrialba IX/61 (UMMZ). GCTE: Arenal '66 (FWFC); Tilaran '66

(FWFC), La Cruz III/51 (IEMS). LIMN: Pto. Limón '66 (UMMZ). PUNT:

Mata de Limón VIII/66 (FWFC). SJOS: San Jose (RZCR).

Latiblattella bradleyi Hebard 1933.—Hebard (1933).

LIMN: Guapiles '23 (ANSP); La Emilia '27 (ANSP).

Latiblattella inornata Hebard 1920.—Hebard (1920).

LIMN?: "Costa Rica, probably Limón" (from steamship) X/13.

Latiblattella pavidata (Rehn 1903).—Rehn (1903).—Princis (1969).

LIMN: Pto. Limon '64 (FWFC). SJOS: Piedras Negras (USNM).

Latiblattella spectativa (Rehn 1903).—Rehn (1903).—Princis (1969).

ALAJ: San Carlos (USNM). SJOS: Cd. Universitaria X/62 (USNM).

Latiblattella vitrea (Brunner 1865).—Biolley (1900).—Princis (1969).

SJOS: San Jose (Biolley).

- Latiblattella zapoteca* (Saussure 1862).—Biolley (1900).—Rehn (1905).—Princis (1969).
ALAJ: Río Surubres, San Mateo (ANSP). CART: Turrialba (Biolley). HERD: Finca Starke, near Pto. Viejo II/66 (ANSP).
- Latiblattella* n. sp.
CART: Tapanti '66 (FWFC). GCTE: Tilaran '66 (FWFC). SJOS: Aserri '66 (FWFC).
- Macrophyllodromia maximiliani* (Saussure 1873).—Princis (1969).
PUNT: Rincón, Osa (Insecticide Plot #36) II/65 (ANSP). SJOS: Playon, near Parrita (AWCR).
- Nahublattella fraterna* (Saussure & Zehntner 1893) (= *Blatta fraterna* S. & Z. 1893).—Princis (1965b, 1969).
CART: Turrialba IX/61 (UMMZ). GCTE: La Cruz III/51 (IEMS). LIMN: Pto. Limón VII/66 (UMMZ).
- Nahublattella nahua* (Saussure 1868) (= *Blatta nahua* Saussure 1868).—Biolley (1900).—Rehn (1903).—Princis (1969).
Recorded from 10 localities in 6 provinces, all except GCTE.
- "*Neoblattella*" n. sp. B
CART: Turrialba III/65 (USNM). LIMN: Waldec VII/35 (USNM).
- "*Neoblattella*" n. sp. R
PUNT: San Vito III/69 (DCRC).
- "*Neoblattella*" n. sp. V
CART: Turrialba II/65 (USNM).
- "*Neoblattella*" n. sp. W
SJOS: 15 Km. No. of Quepos '65 (USNM).
- "*Neoblattella*" n. sp. X
PUNT: 3.5 mi. So. of Rincón, Osa III/69 (DCRC).
- Plectoptera hastifera* Rehn 1903.—Rehn (1903).—Princis (1965a).
CART: Turrialba (USNM).
- Plectoptera picta* Saussure & Zehntner 1893.—Rehn (1903).—Princis (1965a).
CART: El Alto de Ochomogo VIII/27 (ANSP); Tapanti '66 (FWFC); Tucurrique (USNM).
- Plectoptera pulicaria* Saussure & Zehntner 1893.—Rehn (1903).—Princis (1965a).
CART: Turrialba (USNM).
- Rhytidometopum* n. sp.
SJOS: Playon, near Parrita VIII/66 (FWFC).
- Riatia flabellata* (Saussure & Zehntner 1893) (= *Anaplecta flabellata* S. & Z. 1893).—Rehn (1903).—Princis (1965a).
CART: Tucurrique (USNM). SJOS: Finca Castilla '40 (AWCR); Piedras Negras (USNM).
- Riatia fulgida* (Saussure 1862) (= *Anaplecta fulgida* Saussure 1862).—Rehn (1903).—Princis (1965a).
SJOS: La Palma VIII/23 (ANSP); Piedras Negras (USNM).
- Supella longipalpa* (Fabricius 1798) (= *supellectilium* (Serville 1839)).—Princis (1969) "circumtropical."
LIMN: Pto. Limón (RZCR). SJOS: Cd. Universitaria (RZCR); San Jose (AWCR).

BLABERIDAE

BLABERINAE

Archimandrita marmorata (Stoll 1813).—Tristán (1896).—Calvert & Calvert (1917).—Princis (1963).

ALAJ: Alajuela (AWCR); Atenas II/70 (VPIC); La Garite (AWCR). HERD: San Antonio Belen (AWCR). GCTE: Bebedero (Tristán); Santa Cruz (ANSP); Tilaran '64 (FWFC). SJOS: Monte Redondo (Tristán); San Jose (AWCR).

Archimandrita tessellata Rehn 1903.—Rehn (1903).—Hebard (1920).—Princis (1963).

ALAJ: Alajuela (AWCR); San Carlos (USNM). GCTE: 11 Km. So. of Cañas Taboga III/69 (DCRC); Puerto Humo '64 (FWFC). HERD: San Antonio Belen (AWCR). PUNT: Golfito (AWCR). SJOS: Monte Redondo (ANSP); Pozo Azul (AWCR); San Jose (Escazu) '64 (FWFC); Tarbaca (ANSP).

Blaberus colosseus (Illiger 1801) (= *B. giganteus* (L. 1758), in part).—Hebard (1916b).—Roth (1969).

ALAJ: Alajuela (AWCR); San Carlos (USNM). CART: Cartago (AWCR); Turrialba '61 (UMMZ). GCTE: Tilaran '63 (FWFC). HERD: La Selva II/67 (ANSP). PUNT: Rincón, Osa III/69 (DCRC). SJOS: San Jose (AWCR).

Blaberus craniifer Burmeister 1838 (= *B. trapezoides* Burmeister 1838).—Tristán (1896).—Biolley (1900).—Rehn (1903).—Roth (1969).—Princis (1963).

ALAJ: Bebedero (Tristán); San Carlos (USNM); Santa Clara (Biolley) (ANSP). CART: Turrialba (Biolley) (ANSP).

Blaberus discoidalis (Serville 1839).—Roth (1969).

HERD: Heredia (AWCR). LIMN: Pto. Limón '64 (FWFC). PUNT: Puntarenas '64 (FWFC). SJOS: Cd. Universitaria (AWCR); Moravia (AWCR); San Jose (AWCR).

Eublaberus distanti (Kirby 1903) (= *Blaberus biolleyi* Rehn 1905).—Rehn (1905).—Princis (1963).

LIMN: Rio Reventazon, Plains of Santa Clara (ANSP). PUNT: Rincon, Osa II/69 (DCRC).

Eublaberus posticus (Erichson 1848) (= *Blaberus thoracicus* S. & Z. 1894).—Rehn (1905).—Princis (1963).

HERD: Pto. Viejo (AWCR). LIMN: Rio Reventazon, Plains of Santa Clara (ANSP). SJOS: San Jose (AWCR).

Hyporhcnoda carinata (Biolley 1900).—Biolley (1900).—Princis (1967).

ALAJ: Las Delicias, Santa Clara (Biolley). CART: Turrialba (Biolley). HERD: La Virgen, Rio Sarapiquí (Biolley).

Hyporhcnoda reflexa (Saussure & Zehntner 1893) (= *Rhcnoda reflexa* S. & Z. 1893).—Hebard (1920).—Princis (1967).

GCTE: Tilaran '64 (FWFC). PUNT: Ujarras de Terraba, head of Rio Ceibo (USNM). SJOS: 15 Km. No. of Quepos (AWCR); San Jose (AWCR).

Hyporhcnoda sp.

GCTE: Tilaran '66 (USNM). LIMN: La Lola, Madre de Dios '61 (UMMZ).

Phoetalia pallida (Brunner 1865) (= *Leurolestes pallidus* (Brunner) in Hebard (1921)).—Princis (1967) "circumtropical."

SJOS: San Jose '61 (RZCR).

ZETOBORINAE: PHORTIOECINI

Capucina patula (Walker 1871) (= *C. cucullata* Saussure 1893).—Biolley (1900).—Rehn (1903).—Princis (1963).

ALAJ: Las Delicias, Santa Clara (Biolley). CART: Juan Viñas (Biolley); Turrialba (Biolley). GCTE: Tilaran '66 (FWFC). HERD: Carillo (USNM); La Virgen, Río Sarapiquí (Biolley). LIMN: Pto. Limón (AWCR). SJOS: 15 Km. No. of Quepos '66 (FWFC); San Jose, Río Virilla (Biolley).

Lanxoblatta n. sp.

PUNT: San Vito II/70 (VPIC).

Phortioeca phoraspoidea (Walker 1871) (= *Zetobora sublobata* S. & Z. 1893).—Biolley (1900).—Rehn (1903).—Princis (1964).

ALAJ: Quesada '66 (FWFC); Las Delicias, Santa Clara (Biolley); San Carlos (USNM). CART: Turrialba (Biolley). GCTE: Arenal '66 (FWFC); Tilaran '64 (FWFC). HERD: Pto. Viejo (AWCR). SJOS: 16 Km. No. of Quepos '66 (FWFC).

EPILAMPRINAE

Audreia carinulata (Saussure 1895) (= *Calolampyra carinulata* Saussure 1895).—Biolley (1900).—Princis (1967).

ALAJ: near Volcan Poas '66 (FWFC). HERD: Barba (Biolley); La Selva II/67 (ANSP). SJOS: El Cañon '66 (FWFC); La Palma '66 (FWFC); Tablazo (ANSP); Tarbaca (Biolley).

Audreia cicatricosa (Rehn 1903).¹ (= *Calolampyra cicatricosa* Rehn 1903).—Rehn (1903).—Princis (1967).

ALAJ: San Carlos (USNM). PUNT: Rincón, Osa II/65 (ANSP).

Audreia gatunae Hebard 1920.¹

PUNT: Rincón, Osa III/69 (DCRC). SJOS: Damas, near Parrita (AWCR); Pozo Azul (AWCR); 14 Km. No. of Quepos VIII/66 (FWFC).

Audreia n. sp.¹

HERD: Finca La Selva I/70 (VPIC). PUNT: San Vito '67 (USNM).

Cariacasia capucina Rehn 1928.—Rehn (1928).—Princis (1963).

HERD: Carillo IX/03 (ANSP).

Epilampyra abdomen-nigrum (DeGeer 1773) (= *E. maya* Rehn 1902).—Biolley (1900).—Princis (1967).

CART: Tapanti '41 (AWCR); Turrialba (Biolley). HERD: Pto. Viejo IV/69 (DCRC). SJOS: Cd. Universitaria (RZCR); San Jose, Río Virilla '64 (FWFC).

Epilampyra azteca Saussure 1868.

HERD: Finca La Selva I/70 (VPIC). PUNT: San Vito III/69 (DCRC).

Epilampyra columbiana Saussure 1895.—Biolley (1900).

CART: San Isidro del Coronado (RZCR); Tapanti (AWCR). HERD: Volcan Barba (Biolley). PUNT: San Vito III/69 (DCRC). SJOS: Cd. Universitaria (RZCR); La Palma (Biolley); San Isidro del General (Biolley).

Epilampyra mexicana Saussure 1862.

GCTE: Tilaran '66 (FWFC). HERD: Heredia (AWCR). SJOS: San Isidro del General '60 (USNM).

¹ Unpublished work on the Epilamprinae by L. M. Roth indicates that these species probably belong in the genus *Epilampyra*.

Epilampra shelfordi Hebard 1919. Previously recorded only from 2 specimens collected in Colombia (Hebard, 1919, 1929).

ALAJ: Colonia Trinidad, Chachagua VIII/66 (FWFC).

Epilampra n. sp.

HERD: Pto. Viejo, Rio Sarapiqui (pebble beach) II/67 (ANSP).

Litopeltis biolleyi (Saussure 1895) (= *Calolampra biolleyi* Saussure 1895).—Tristán (1896).—Biolley (1900).—Rehn (1928).—Princis (1963).

ALAJ: Las Delicias, Santa Clara (Biolley). CART: Azahar de Cartago (Biolley). HERD: Barba (Biolley). PUNT: Rincón, Osa II/67 (FWFC); San Vito III/69 (DCRC). SJOS: Cd. Universitaria IV/64 (RZCR); La Estrella (Candelaria Mts.) (ANSP); Monte Redondo '03 (ANSP); Navarro '27 (ANSP); 14 Km. No. of Quepos VIII/66 (FWFC); San Jose (La Uruca) (Tristán); Tablazo '06 (ANSP); Tarbaca '02 (ANSP).

Litopeltis bispinosa (Saussure 1893) (= *Calolampra bispinosa* Saussure 1893). CART: Turrialba III/65 (USNM). PUNT: San Vito III/69 (DCRC). SJOS: San Isidro del General '66 (UMMZ).

Litopeltis calverti Rehn 1928.—Rehn (1928).—Princis (1963).

CART: Rio Reventazon at Cachi III/10 (ANSP).

Litopeltis deianira Rehn 1928.—Rehn (1928).—Princis (1963).

CART: between Cervantes & Pacayas '23 (ANSP); Pacayas, slope of Volcan Irazu IX/23 (ANSP).

Litopeltis musarum Rehn 1928.—Rehn (1928).—Princis (1963).

SJOS: Atalanta, Estrella Valley IX/27 (ANSP).

Litopeltis oreas Rehn 1928.—Rehn (1928).—Princis (1963).

SJOS: Santa Maria de Dota '09 (ANSP).

Litopeltis votos Rehn 1928 (= *Ischnoptera inaequalis* S. & Z. 1893).—Rehn (1903).—Rehn (1928).—Princis (1963).

ALAJ: San Carlos (USNM).

PANCHLORINAE

Achroblatta luteola (Blanchard 1843).—Rehn (1903).—Princis (1963).

ALAJ: Zarcero (USNM). CART: Turrialba II/65 (USNM). HERD: Carillo (USNM); Rio Frio I/70 (VPIC); Rio Sarapiqui '65 (RZCR).

Biolleya alaris Saussure 1897.—Biolley (1900).—Princis (1963).

HERD: Volcan Barba III/96 (Biolley). SJOS: La Palma II/96 (Biolley); near San Jose (Biolley).

Panchlora acolhua Saussure & Zehntner 1893.—Rehn (1903).—Princis (1964).

SJOS: Piedras Negras (USNM).

Panchlora exoleta Burmeister 1838 (= *P. punctum* S. & Z. 1893).—Rehn (1903).—Princis (1964).

ALAJ: San Carlos (USNM).

Panchlora nigricentris Shelford 1912.—Biolley (1900).—Princis (1964).

CART: Azahar de Cartago (Biolley). SJOS: Los Frailes (Biolley); near San Jose (Biolley); Tablazo (Biolley).

Panchlora nivea (L. 1758) (= *P. peruana* Saussure 1864, in part).—Saussure & Zehntner (1893).—Rehn (1903).—Princis (1964), "Central America."

Recorded from several localities in CART, GCTE. HERD, LIMN and SJOS. First record from CART: Cachi by S. & Z. (1893).

Pauchlora sp.

GCTE: La Pacifica, 5 Km. NW of Cañas I/70 (VPIC). HERD: Rio Frio I/70 (VPIC). PUNT: San Vito II/70 (VPIC).

Pelloblatta lata Rehn 1903.—Rehn (1903).—Princis (1965a).

ALAJ: San Carlos (USNM).

PYCNOSCELINAE

Pycnoscelus surinamensis (L. 1758).—Biolley (1900).—Princis (1964) "circum-tropical."

Abundant.

OXYHALOINAE

Leucophaea maderae (Fabricius 1781).—Princis (1965a) "circumtropical."

ALAJ: Alajuela (AWCR). HERD: Heredia (AWCR). SJOS: Cd. Universitaria (RZCR); San Jose '64 (FWFC).

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